

> d his ful

(FILE 'HOME' ENTERED AT 23:47:56 ON 25 JUN 2002)

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISALERTS, ADISINSIGHT,
ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS,
CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2,
DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 23:48:16
ON 25 JUN 2002
L1 112 SEA (CALCIUM OR (CALCIUM AND MAGNESIUM)) AND ((ACID? OR
CITRIC OR MALIC OR CALCIUM) (10A) (EQ OR EQUIV?)) AND (INULIN? OR
FRUCTOOLIGOSACC? OR FRUCTO-OLIGOSACC?)
L2 30 SEA L1 AND (ISOFLAVONE OR VITAMIN D OR VITAMIN K OR VITAMIN
D3 OR VITAMIN D".SUB."3 OR MALTOL OR CARRAGEENAN OR MALTODEXTRIN
OR MALTO DEXTRIN OR XANTHAN GUM OR VITAMIN E OR DAIDZEIN OR
GENISTEIN OR GLYCITEIN)
L3 29 DUP REM L2 (1 DUPLICATE REMOVED)
D 1-29
D 13 KWIC
L4 82 SEA L1 NOT L2
L5 82 DUP REM L4 (0 DUPLICATES REMOVED)
D 1-82

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L33 ANSWER 26 OF 98 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1993:448289 CAPLUS
DOCUMENT NUMBER: 119:48289
TITLE: Effects of fructooligosaccharides and other saccharides on calcium, magnesium, and phosphorus absorption in rats
AUTHOR(S): Ohta, Atsutane; Osakabe, Naomi; Yamada, Kazuhiko; Saito, Yasuhiro; Hidaka, Hidemasa
CORPORATE SOURCE: Biosci. Lab., Meiji Seika Kaisha, Ltd., Sakado, 350-02, Japan
SOURCE: Nippon Eiyo, Shokuryo Gakkaishi (1993), 46(2), 123-9
CODEN: NESGDC; ISSN: 0287-3516
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
CLASSIFICATION: 18-4 (Animal Nutrition)
ABSTRACT:
The effects of administration of lactose (LA), fructooligosaccharides (FO) and other oligosaccharides in the diet on absorption of Ca, Mg, and P in weanling male rats were examd. by in vivo studies. In rats fed the FO diet, Ca, Mg, and P absorption was significantly higher than in rats fed the LA diet. FO had a dose-dependent effect on mineral absorption. The enhancement of Ca, Mg, and P absorption by FO persisted for 1 to >1 mo. A significant increase in the ash and mineral contents of the femur was obsd. in rats fed the FO diet as compared with controls. FO had a pos. effect on mineral absorption. Galactooligosaccharides and raffinose had similar but variable effects. Isomaltoligosaccharides had no effect. There was a pos. correlation between mineral absorption and L-lactate concn. in the cecum. L-Lactate concn. in the cecum might have a direct effect on mineral absorption.

SUPPL. TERM: mineral absorption fructooligosaccharide lactose diet; oligosaccharide diet mineral absorption
INDEX TERM: Mineral elements
ROLE: BIOL (Biological study)
(of femur, dietary oligosaccharides effect on)
INDEX TERM: Biological transport
(absorption, of minerals, dietary oligosaccharides effect on)
INDEX TERM: Intestine, composition
(cecum, org. acids and pH of, dietary oligosaccharides effect on)
INDEX TERM: Bone, composition
(femur, mineral compn. and wt. of, dietary oligosaccharides effect on)
INDEX TERM: Oligosaccharides
ROLE: BIOL (Biological study)
(fructose-contg., mineral absorption response to dietary)
INDEX TERM: Oligosaccharides
ROLE: BIOL (Biological study)
(galactose-contg., mineral absorption response to dietary)
INDEX TERM: Oligosaccharides
ROLE: BIOL (Biological study)
(isomaltose-contg., mineral absorption response to dietary)
INDEX TERM: 7439-95-4, Magnesium, biological studies
7440-70-2, Calcium, biological studies
7723-14-0, Phosphorus, biological studies
ROLE: BIOL (Biological study)
(absorption of, dietary oligosaccharides effect on)
INDEX TERM: 63-42-3, Lactose 512-69-6, Raffinose 125692-63-9,
Meioligo P 129038-02-4, Cup Oligo P 148465-13-8,
Isomalto 900P
ROLE: BIOL (Biological study)

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INDEX TERM:

(mineral absorption response to dietary)
64-19-7, Acetic acid, biological studies 79-09-4,
Propionic acid, biological studies 79-33-4, L-Lactic acid,
biological studies 107-92-6, Butyric acid, biological
studies 10326-41-7, D-Lactic acid, biological studies
ROLE: BIOL (Biological study)
(of cecum, dietary oligosaccharides effect on)

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